

Attachment 1 to Paper No. 13

MARKED UP VERSION OF AMENDED CLAIMS

20. (Amended) A differential pressure measuring probe adapted for [transverse] diametric placement within a fluid-carrying conduit, comprising,

a body having an upstream facing impact surface and at least one downstream non-impact surface, where the upstream facing impact surface is substantially flat and adapted to be disposed perpendicularly to the direction of fluid flow in the conduit,

at least one fluid pressure transmitting plenum within the body, and

at least one opening in the flat upstream facing impact surface of the body, establishing fluid communication between the fluid in the conduit and the at least one fluid pressure transmitting plenum, whereby the flat upstream facing impact surface of the probe body creates a relatively quiescent stagnation area upstream of the probe.

21. (Amended) The probe of claim 20 and further comprising, [at least one downstream non-impact surface,]

at least one non-impact fluid pressure transmitting plenum within the body,
and

at least one opening in the at least one non-impact surface of the body establishing fluid communication between the fluid in the conduit and the at least one non-impact fluid pressure transmitting plenum.

22. (Amended) The probe of claim 21 where the body includes a longitudinally extending and downstream extending hollow rib portion having at least one of the non-impact surfaces and containing therein the at least one fluid pressure transmitting [hollow section] plenum.

23. (Amended) The probe of claim [21] 20 where the downstream non-impact surface is substantially flat and parallel to the flat upstream facing impact surface.

28. (Amended) A differential pressure measuring probe adapted for placement within a fluid-carrying conduit, comprising,

a bluff body having a width and a flat upstream facing fluid impact surface coextensive with the width of the body, whereby a localized region of [quiescent] total fluid pressure is created [on the impact surface] in the fluid across the width of the bluff body.

31. (Amended) A method of measuring differential pressure in the flowing fluid within a closed conduit as a factor in determining the rate of fluid flow in the conduit, comprising,

creating an upstream zone of relative [quiescence] quiescent stagnation within the flowing fluid proximate the flat upstream facing surface of a bluff body positioned in the flowing fluid perpendicularly to the direction of fluid flow;

detecting the total pressure of the fluid at the flat upstream facing surface of the bluff body, and

communicating the total pressure to a pressure sensor.